UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
FRENEL, VANEL

ART UNIT	PAPER NUMBER
3626	

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>02 April 2004</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>42-56</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>42-56</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant

1.   This communication is in response to the Amendment filed on 4/2/04. Claims 1-

46 have been canceled. Claims 42-56 have been newly added. Claims 42-56 are

pending.

2.   Applicant's arguments filed on 4/2/04 regarding the 35 U.S.C 101 rejection have

been persuasive, hence, the rejection is hereby withdrawn.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 42-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Morgan et al (5,799,286) hereinafter Morgan in view of Ulwick (6,115,691).

(A)   As per claim 42, Morgan discloses a computer-implemented method of managing

a process, said computer-implemented method comprising:

identifying activities that comprise the process (See Morgan, Col.7, lines 14-44);

identifying measurable drivers for each of the activities (See Morgan, Col.7, lines

14-44);

identifying bridge variables, wherein each bridge variable is a driver that is

relevant to more than one of said activities (See Morgan, Col.20, lines 13-61).

Morgan does not explicitly disclose that the method having establishing a

relationship between various drivers by representing each non-bridge variable driver in

terms of one or more of said bridge variables only;

using said relationship, representing each of said activities at least as a function

of one or more of said bridge variables, thereby reflecting interdependence between

said activities; and

generating a model of said process at least as a function of said bridge variables

by combining representations of all activities comprising said process.

However, these features are known in the art, as evidenced by Ulwick. In

particular, Ulwick suggests that the method having establishing a relationship between

various drivers by representing each non-bridge variable driver in terms of one or more

of said bridge variables only (See Ulwick, Col.1, lines 41-67; Col.3, lines 27-67);

using said relationship, representing each of said activities at least as a function

of one or more of said bridge variables, thereby reflecting interdependence between

said activities (See Ulwick, Col.1, lines 41-67 to Col.2, line 12); and

generating a model of said process at least as a function of said bridge variables

by combining representations of all activities comprising said process (See Ulwick,

Col.1, lines 14-67 to Col.2, line 12).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to have included the features of Ulwick within the system of Morgan with the

motivation of providing systematically accelerating the evolution of a process or

satisfying a set of desired outcomes. A process is a series of activities or events that

produce a desired result, which may comprise a plurality of desired outcomes. All

strategies, products or services as well as other solutions are designed to improve or

enable a process (See Ulwick, Col.9, lines 5-17).

(B)   As per claim 43, Ulwick discloses the computer-implemented method further

comprising:

selecting a plurality of constraints (See Ulwick, Fig.17, element 211; Col.22, lines

37-67),

and wherein generating said model of said process includes generating said

model as a function of said bridge variables and said plurality of constraints (See

Ulwick, Fig.17, element 211; Col.22, lines 37-67).

The motivation for combining the respective teachings of Morgan and Ulwick are

as discussed above in the rejection of claim 42, and incorporated herein.

(C)   As per claim 44, Ulwick discloses the computer-implemented method further

comprising:

optimizing said model in view of said plurality of constraints using one of the

following:

a linear programming algorithm (See Ulwick, Col.22, lines 37-67),

a mixed-integer linear programming algorithm, and

a mixed-integer nonlinear programming algorithm (See Ulwick, Col.3, lines 34-65); and

reconstructing a physical representation of said activities and said drivers using said optimized model (See Ulwick, Col.17, lines 21-67);

The motivation for combining the respective teachings of Morgan and Ulwick are as discussed above in the rejection of claim 42, and incorporated herein.

(D)   As per claim 45, Ulwick discloses the computer-implemented method wherein said reconstructing includes calculating a value of each non-bridge variable driver using values of corresponding bridge variables only, and calculating a value of each said activity using values calculated for each bridge variable driver and non-bridge variable driver of said activity (See Ulwick, Col.).

(E)   As per claim 46, Ulwick discloses the computer-implemented method further comprising:

revising said model using the results from said optimization step (See Ulwick, Col.21, lines 48-56).

The motivation for combining the respective teachings of Morgan and Ulwick are as discussed above in the rejection of claim 42, and incorporated herein.

(F)   As per claim 47, Ulwick discloses the computer-implemented method wherein

selecting said plurality of constraints includes selecting economic and non-economic

constraints (See Ulwick, Fig.17, element 211; Col.22, lines 37-67).

The motivation for combining the respective teachings of Morgan and Ulwick are

as discussed above in the rejection of claim 42, and incorporated herein.

(G)   As per claim 48, Ulwick discloses the computer-implemented method wherein

identifying measurable drivers includes identifying economic and non-economic drivers

(See Ulwick, Fig.17, element 211; Col.22, lines 37-67).

The motivation for combining the respective teachings of Morgan and Ulwick are

as discussed above in the rejection of claim 42, and incorporated herein.

(H)   As per claim 49, Ulwick discloses the computer-implemented method wherein

identifying said drivers includes identifying at least one of fixed and variable

components of each said driver, and wherein said method further comprising:

costing each said measurable driver for said at least one of fixed and variable

components thereof (See Ulwick, Col.17, lines 30-43).

The motivation for combining the respective teachings of Morgan and Ulwick are

as discussed above in the rejection of claim 42, and incorporated herein.

(I)   As per claim 50, Morgan discloses a system, comprising:

a computer (See Morgan, Col.3, lines 55-64);

input and output devices in communication with said computer (See Morgan,

Col.3, lines 64 to Col.4, line 11); and

a memory encoded with a computer program (See Morgan, Col.4, lines 44-60),

which, when executed by said computer, causes said computer to perform the following:

allow a user to identify activities that comprise a process,

further allow said user to identify measurable drivers for each of the activities,

identify bridge variables, wherein each bridge variable is a driver that is relevant

to more than one of said activities (See Morgan, Col.6, lines 14-63).

Morgan does not explicitly disclose that the system having establish a

relationship between various drivers by representing each non-bridge variable driver in

terms of one or more of said bridge variables only,

using said relationship, represent each of said activities at least as a function of

one or more of said bridge variables, thereby reflecting interdependence

between said activities, and

generate a model of said process at least as a function of said bridge variables

by combining representations of all activities comprising said process.

However, these features are known in the art, as evidenced by Ulwick. In

particular, Ulwick suggests that the method having establish a relationship between

various drivers by representing each non-bridge variable driver in terms of one or more

of said bridge variables only (See Ulwick, Col.1, lines 41-67; Col.3, lines 27-67),

using said relationship, represent each of said activities at least as a function of

one or more of said bridge variables, thereby reflecting interdependence between said

activities (See Ulwick, Col.1, lines 41-67 to Col.2, line 12), and

generate a model of said process at least as a function of said bridge variables

by combining representations of all activities comprising said process (See Ulwick,

Col.1, lines 14-67 to Col.2, line 12).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to have included the features of Ulwick within the system of Morgan with the

motivation of providing systematically accelerating the evolution of a process or

satisfying a set of desired outcomes. A process is a series of activities or events that

produce a desired result, which may comprise a plurality of desired outcomes. All

strategies, products or services as well as other solutions are designed to improve or

enable a process (See Ulwick, Col.9, lines 5-17).

(J)   Claim 53 differs from claims 42 and 50 by reciting a computer-readable data

storage medium containing program instructions, which, when executed by a processor,

cause said processor to perform the following.

As per this limitation, it is noted that Morgan discloses allow a user to identify

activities that comprise a process (See Morgan, Col.7, lines 14-44);

further allow said user to identify measurable drivers for each of the activities

(See Morgan, Col.7, lines 14-44);

identify bridge variables, wherein each bridge variable is a driver that is relevant

to more than one of said activities (See Morgan, Col.20, lines 13-61) and Ulwick

discloses establish a relationship between various drivers by representing each non-bridge variable driver in terms of one or more of said bridge variables only (See Ulwick, Col.1, lines 41-67; Col.3, lines 27-67);

using said relationship, represent each of said activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence between said activities (See Ulwick, Col.1, lines 41-67 to Col.2, line 12); and

generate a model of said process at least as a function of said bridge variables by combining representations of all activities comprising said process (See Ulwick, Col.1, lines 41-67 to Col.2, line 12).

Thus, it is readily apparent that these prior art systems utilize a computer-readable data storage medium containing program instructions, which, when executed by a processor to perform their specified function.

The remainder of claim 53 is rejected for the same reasons given above for claims 42 and 50, and are incorporated herein.

(K)   Claims 51-52 and 54-55 recite the underlying process steps of the elements of claims 44-45, and respectively. As the various elements of claims 44-45 have been shown to be either disclosed by or obvious in view of the collective teachings of Morgan and Ulwick, it is readily apparent that the apparatus disclosed by the applied prior art performs the recited underlying functions. As such, the limitations recited in claims 51-52 and 54-55 are rejected for the same reasons given above for the method claims 44-45, and incorporated herein.

(L)   As per claim 56, Ulwick discloses the storage medium wherein said program

instructions, upon execution, cause said processor to cost each said driver identified by

said user (See Ulwick, Col.22, lines 37-67 to Col.23, line 13).

Response to Arguments

5.   Applicant's arguments filed 1/17/06 with respect to claims 1-14 have been fully

considered but they are not persuasive. Applicant's arguments will be addressed

hereinbelow in the order they appear in the response filed on 1/17/06.

(A)   At pages 6-8 of the 1/17/06 response, Applicant argues the followings:

        (1) The subject matter recited in added claims 42-56 would not have been

obvious under Morgan in view of Ulwick at the time of the invention.

        Neither Morgan nor Ulwick, either alone or in combination, teach or suggest the

combination of computer-implemented claim steps recited in claim 42.

(B)   With respect to Applicant's arguments, Examiner respectfully submitted that

that obviousness is determined on the basis of the evidence as a whole and the relative

persuasiveness of the arguments. See *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d

1443, 1444 (Fed. Cir. 1992); *In re Hedges*, 783 F.2d 1038, 1039, 228 USPQ 685,686

(Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785,788 (Fed. Cir.

1984); and *In re Rinehart*, 531 F.2d 1048, 1052, 189 USPQ 143,147 (CCPA 1976).

Using this standard, the Examiner respectfully submits that he has at least satisfied the

burden of presenting a *prima facie* case of obviousness, since he has presented

evidence of corresponding claim elements in the prior art and has expressly articulated

the combinations and the motivations for combinations that fairly suggest Applicant's

claimed invention.

Rather, Applicant does not point to any specific distinction(s) between the

features disclosed in the references and the features that are presently claimed. In

particular, 37 CFR 1.111(b) states, "A general allegation that the claims define a

patentable invention without specifically pointing out how the language of the claims

patentably distinguishes them from the reference does not comply with the

requirements of this section." Applicant has failed to specifically point out how the

language of the claims patentably distinguishes them from the applied references.

Also, arguments or conclusions of Attorney cannot take the place of evidence. *In re

Cole*, 51 CCPA 919, 326 F.2d 769, 140 USPQ 230 (1964); *In re Schulze*, 52 CCPA

1422, 346 F.2d 600, 145 USPQ 716 (1965); *Mertizner v. Mindick*, 549 F.2d 775, 193

USPQ 17 (CCPA 1977).

In addition, the Examiner recognizes that references cannot be arbitrarily altered

or modified and that there must be some reason why one skilled in the art would be

motivated to make the proposed modifications. However, although the Examiner

agrees that the motivation or suggestion to make modifications must be articulated, it is

respectfully contended that there is no requirement that the motivation to make

modifications must be expressly articulated within the references themselves.

References are evaluated by what they suggest to one versed in the art, rather than by

their specific disclosures, *In re Bozek*, 163 USPQ 545 (CCPA 1969).

The Examiner is concerned that Applicant apparently ignores the mandate of the numerous court decisions supporting the position given above. The issue of obviousness is not determined by what the references expressly state but by what they would reasonably suggest to one of ordinary skill in the art, as supported by decisions in *In re DeLisle* 406 Fed 1326, 160 USPQ 806; *In re Kell, Terry and Davies* 208 USPQ 871; and *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988) (citing *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)). Further, it was determined in *In re Lamberti et al*, 192 USPQ 278 (CCPA) that:

(i)   obviousness does not require absolute predictability;

(ii)   non-preferred embodiments of prior art must also be considered; and

(iii) the question is not <u>express</u> teaching of references, but what they would suggest.

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

V.F

V.F

April 27, 20006

JOSEPH THOMAS
SUPERVISORY PATENT EXAMINER